Psyllium Husk Should Be Taken at Higher Dose with Sufficient Water to Maximize Its Efficacy

To the Editor:

I read with great interest the wonderful review article by McRorie and McKeown.[1] Psyllium husk is a soluble fiber that has high viscosity, due to which it has significant beneficial effect of lowering low-density lipoprotein (LDL) cholesterol and improving glycemic control.[1] As psyllium husk is nonirritating to the large bowel, is nonfermenting, and has high water holding capacity, it has dichotomous stool-normalizing effect (soften the hard stools in constipation, firm-up liquid stools in diarrhea, and normalize stool form in irritable bowel syndrome).[1]

For the psyllium husk to have full beneficial effect, it is necessary that it is taken with adequate amount of water. The husk absorbs (hold) water and gets swollen. Logically, for the husk to absorb maximum water, sufficient water has to be available. This water, absorbed by the psyllium husk, is not allowed to be absorbed by the intestines and is taken to the end of the gut. The resultant increase in water content of the stools along with increased fiber makes the stool softer and bulkier.

This point that psyllium husk should be taken along with adequate amount of water is routinely communicated to the patients by the physicians, but is not stressed sufficiently. Secondly, the amount of water to be taken with the husk is not quantified objectively. Thirdly, the dose of psyllium fiber usually recommended to the patients and analyzed in most studies is less than adequate (7 to 14 g/day).[1-5] The average adult daily requirement of fiber is 25 to 38 g (women, 25 g/day; men, 38 g/day), and studies have shown that an average American adult takes in less than 15 g of fiber per day.[6,7] Therefore, the fiber supplement should be at least 20 g[7] and it should be taken with at least 500 mL water.[7,8]

LETTERS TO THE EDITOR ARE WELCOME

Letters to the Editor may be submitted at http://ees.elsevier.com/andjrnl for consideration regarding manuscripts published within the past 6 months. Letters should be no more than 500 words, can contain up to 20 references, and should include a funding disclosure, conflict of interest disclosure, and copyright/authorship form. All letters will be subjected to editorial review and decision before acceptance.

Even though the lower dosage (7 to 14 g/day) of psyllium husk is beneficial, these effects seem to increase tremendously when a higher amount is taken with more water (at least 20 to 25 g with 500 mL water at 25 mL water/gram fiber). This was observed in over 700 patients with hemorrhoids and fissure-in-ano at our center.[7-10] Psyllium husk taken in adequate amount along with sufficient water helped to avoid surgery in a majority of patients with advanced hemorrhoids (grade III and IV) and in fissure-in-ano patients on long-term follow-up.[8-10]

Since constipation is the root cause of both hemorrhoids and fissure-in-ano, this method of fiber intake is recommended to our patients for prolonged periods of time. They are counseled in detail regarding the beneficial effects of long-term fiber intake. This helps to increase compliance among the patients. The fissure-in-ano patients are initially recommended lower dosage (3 teaspoons) for 1 month, as more bulk can potentially aggravate the symptoms. After 1 month (fissure healing), the dose of fiber is increased to 5 teaspoons. Most of the patients tolerate this dose quite well and are highly satisfied. However, long-term randomized trials are needed to compare the efficacy of a higher dose (20 to 25 g) vs a routine dose (10 to 12 g) of psyllium husk.

Pankaj Garg, MS, MBBS, MASCRS
Chief Colorectal Surgeon
Garg Fistula Research Institute
Panchkula, Haryana, India
Colorectal Surgery Division
Department of General Surgery
Indus Super Specialty Hospital
Mohali, Punjab, India

STATEMENT OF POTENTIAL CONFLICT OF INTEREST: No potential conflict of interest was reported by the author.

FUNDING/SUPPORT: There is no financial or material support for this research.

References

1. McRorie JW Jr, McKeown NM. Understanding the physics of functional fibers in the gastrointestinal tract: An evidence-based approach to resolving enduring misconceptions about insoluble and soluble fiber. *J Acad Nutr Diet*. 2017;117(2):251-264.
2. Webster DJ, Gough DC, Craven JL. The use of bulk evacuant in patients with haemorrhoids. *Br J Surg*. 1978;65(4):291-292.
3. Perez-Miranda M, Gomez-Cedenilla A, León-Colombo T, Pajares J, Mate-Jimenez J. Effect of fiber supplements on internal bleeding hemorrhoids. *Hepatogastroenterology*. 1996;43(12):1504-1507.
4. McRorie JW, Daggy BP, Morel JG, Diersing PS, Miner PB, Robinson M. Psyllium is superior to docusate sodium for treatment of chronic constipation. *Aliment Pharmacol Ther*. 1998;12(5):491-497.
5. Vega AB, Perelló A, Martos L, et al. Breath methane in functional constipation: Response to treatment with Ispaghula husk. *Neurogastroenterol Motil*. 2015;27(7):945-953.
6. King DE, Mainous AG 3rd, Lambourne CA. Trends in dietary fiber intake in the United States, 1999-2008. *J Acad Nutr Diet*. 2012;112(5):642-648.
7. Garg P. Why should a good proportion of hemorrhoids not be operated on?—Let's TONE up. *Dis Colon Rectum*. 2016;59(6):583-585.
8. Garg P, Singh P. Adequate dietary fiber supplement along with TONE concept can help avoid surgery in most patients with advanced hemorrhoids [published online ahead of print February 1, 2017]. *Minerva Gastroenterol Dietol*. http://dx.doi.org/10.23736/S1121-421X.17.02364-9.
9. Garg P. Local and oral antibiotics with avoidance of constipation (LOABAC) treatment for anal fissure: A new concept in conservative management. *Indian J Surg*. 2016;78(1):80.
10. Garg P, Lakhtaria P. Non-surgical management of chronic fissure-in-ano with high success rate: A simple novel concept in the treatment of chronic fissure-in-ano. *Dis Colon Rectum*. 2014;57(5).E258-258.

http://dx.doi.org/10.1016/j.jand.2017.03.001

Author's Response:

Thank you for your letter, and for sharing your observations and successes in achieving therapeutic goals with psyllium. We offer the following observations for your consideration.

It is important to distinguish between the daily recommended intake

© 2017 by the Academy of Nutrition and Dietetics.